WHAT IS CLAIMED IS:

1. A method of estimating a pilot phase root mean square error comprising:

determining a path width error;

determining a path drift error;

determining a measurement resolution error; and

combining the path width error, the path drift error, and the measurement resolution error to obtain a pilot phase root mean square error estimate.

2. The method of Claim 1, further comprising calculating the path width error using a distance from a peak to a 3dB down point.

3. The method of Claim 1, further comprising calculating the path width error using a distance from a local maxima to an earliest or a latest side.

4. The method of Claim 1, further comprising calculating the path width error using half the path width.

5. The method of Claim 1, further comprising multiplying a path drift with an uncertainty in a measurement time stamp to obtain a time error.

6. The method of Claim 5, further comprising adding the time error to the path drift to obtain the path width error.

7. The method of Claim 1, further comprising reporting the pilot phase root mean square error to a base station.

8. A wireless communication system comprising:

a base station which transmits a pilot signal; and

a mobile station which receives the pilot signal and estimates a pilot phase measurement root mean square error using a path width, a path drift, and a measurement resolution.

9. The wireless communication system of Claim 8, wherein the mobile station reports the pilot phase measurement root mean square error to the base station.

10. The mobile station of Claim 9, wherein the mobile station reports according to IS-801.

11. The wireless communication system of Claim 8, wherein the path width is a distance between an earliest offset that resulted in a significant correlation result and a latest offset that resulted in a significant correlation result where all measurements in between were above a threshold energy.

12. The wireless communication system of Claim 8, wherein the path width is measured to encompass a set of consecutive points with only one local maxima.

13. The wireless communication system of Claim 8, wherein a phase measurement error is calculated as +/- half the path width.

14. The wireless communication system of Claim 8,. wherein a phase measurement error is calculated as a larger of a first distance from a local maxima to an earliest side or a second distance from a local maxima to a latest side.

15. The wireless communication system of Claim 8, wherein a phase measurement error is calculated as a distance from a peak to a point measured a pre-determined amount down from the peak.

16. The wireless communication system of Claim 15, wherein the pre-determined amount down from the peak is 3 dB.

17. The wireless communication system of Claim 8, wherein the path drift is multipled with an uncertainty in a measurement time stamp to obtain an path width error.

18. The wireless communication system of Claim 17, wherein the path width error is reported with a time stamp of the measurement.

19. The wireless communication system of Claim 17, pilot phase measurement root mean square error combines the path width, the path drift, and the measurement resolution.